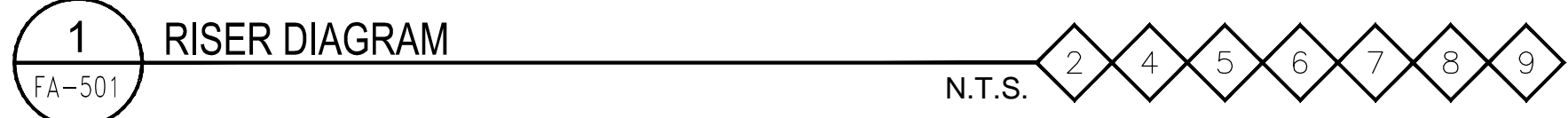
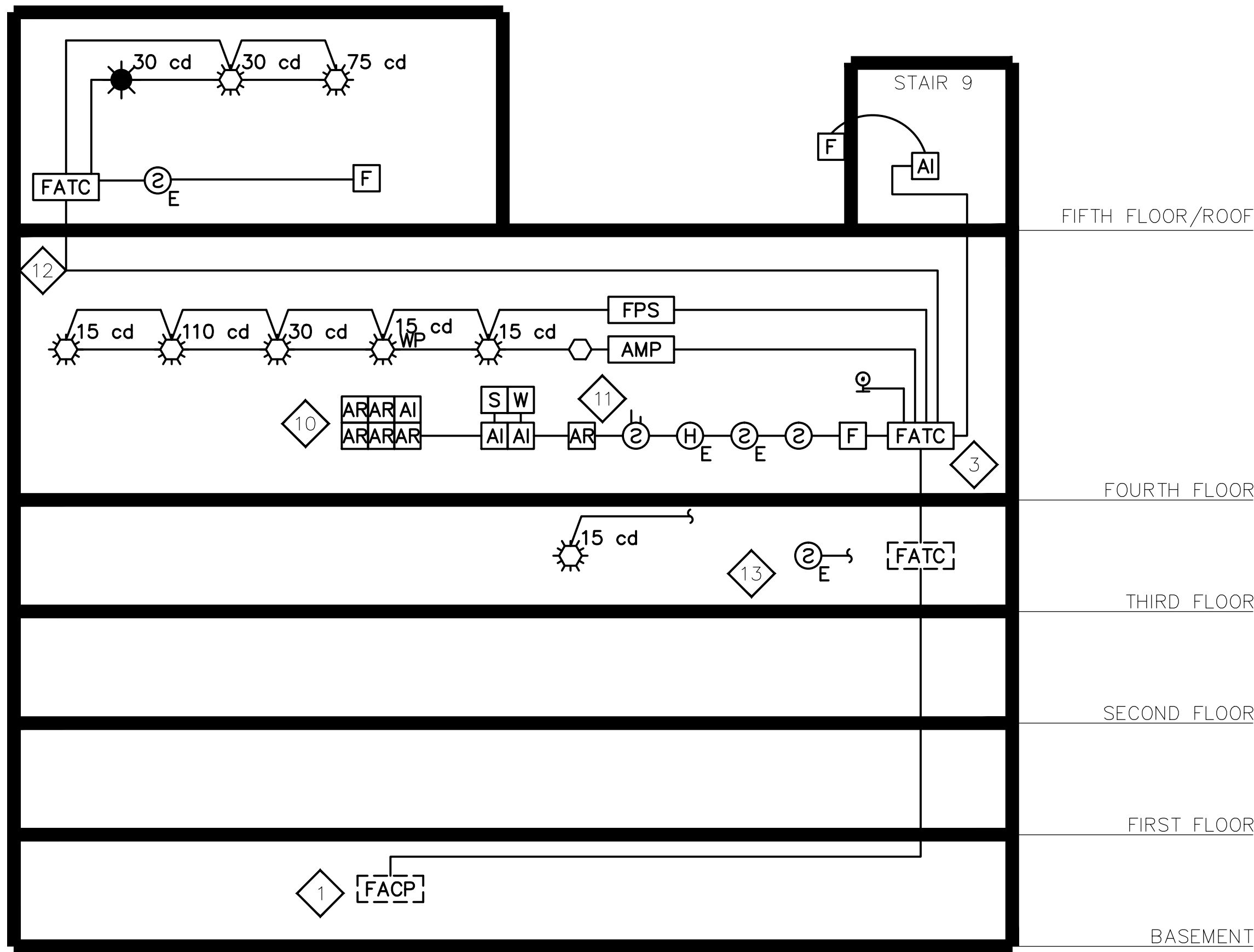


three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot



RISER NOTES

- NEW DEVICES IN WARD 4E SHALL BE MONITORED AND CONTROLLED BY EXISTING SIEMENS MXL-V FACP LOCATED IN BASEMENT CONTROL ROOM. PROVIDE ALL REQUIRED CONNECTIONS, POWER, MODULES, AND PROGRAMMING FOR NEW DEVICES. USE OF A REMOTE, NETWORKED CONTROL PANEL OR SUB-PANEL IS PERMITTED. WIRING BETWEEN REMOTE AND MAIN CONTROL PANELS SHALL BE CLASS A.
- CONTRACTOR SHALL PROVIDE A DEVICE SCHEDULE AND PROGRAM INTO THE FACP ENGLISH LANGUAGE TITLE AND DESCRIPTIONS FOR EACH FIRE ALARM DEVICE MONITORED OR CONTROLLED, INCLUDE DEVICE TYPE, BUILDING ZONE, ROOM NUMBER AND FLOOR NUMBER FOR EACH DEVICE.
- EXISTING RISER AND FIRE ALARM TERMINAL CABINET IS LOCATED IN ELECTRICAL CLOSET THAT IS TO BE DEMOLISHED. NEW TERMINAL CABINET SHALL BE LOCATED IN NEW ELECTRICAL ROOM.
- PROVIDE REMOTE POWER PANELS AND AMPLIFIERS AS NEEDED. PANEL LOCATIONS TO BE COORDINATED WITH COTR AND ENGINEER.
- ADDRESSABLE RELAYS FOR AIR-HANDLING UNIT SHUT-DOWN ARE TO BE INSTALLED ADJACENT TO AIR-HANDLING UNIT CONTROLS (WITHIN 3' [914MM] PER NFPA 72).
- ALL WIRING AND CIRCUITS SHALL BE PROVIDED IN ELECTRICAL METALLIC TUBING OR CONDUIT. MINIMUM SIZE SHALL BE 3/4 INCH [19MM].
- CIRCUIT WIRING SHALL BE AS FOLLOWS:

ADDRESSABLE SIGNALING LINE CIRCUITS (SLC):
#18 AWG, STRANDED COPPER CONDUCTORS, TWISTED/SHIELDED PAIR, TYPE FPL, MARKED "POWER LIMITED FIRE PROTECTIVE SIGNALING CIRCUIT CABLE" AND UL-LISTED FOR THIS INTENDED PURPOSE.

NOTIFICATION APPLIANCE CIRCUITS (NAC):
#14 AWG, THHN-THWN INSULATED, 600 VAC SOLID COPPER CONDUCTORS.

24 VDC POWER CIRCUITS:
#14 AWG, THHN-THWN INSULATED, 600 VAC SOLID COPPER CONDUCTORS.

120 VAC POWER CIRCUITS:
#12 AWG, THHN-THWN INSULATED, 600 VAC SOLID COPPER CONDUCTORS.

- ISOLATE SLC'S FROM NAC'S & 24 VDC POWER PER MANUFACTURER'S RECOMMENDATIONS. (I.E. MAY REQUIRE SEPARATE CONDUIT FOR LOADS GREATER THAN 2 AMPS).
- SEE INDIVIDUAL FLOOR PLANS FOR EXACT QUANTITIES AND LOCATIONS OF EQUIPMENT AND DEVICES. PLAN DRAWINGS TAKE PRECEDENCE OVER THE RISER DIAGRAM FOR QUANTITY.
- PROVIDE ADDRESSABLE RELAYS TO ACTIVATE ELEVATOR RECALL (PRIMARY AND SECONDARY), "FIREMAN'S HAT" LIGHT (FLASHING AND STEADY), AND POWER SHUNT TRIP PROVIDE ADDRESSABLE INTERFACE TO MONITOR ELEVATOR SHUNT TRIP POWER.
- PROVIDE ADDRESSABLE RELAY FOR SMOKE/FIRE DAMPER POWER INTERRUPT. PROVIDE NORMALLY-CLOSED RELAY FOR 120VAC DAMPER POWER CIRCUIT, TO BE CONTROLLED BY ADDRESSABLE RELAY.
- EACH SMOKE COMPARTMENT (5E, 4E-ZONE 1, AND 4E-ZONE 2) SHALL BE PROVIDED WITH A SEPARATE NAC, SPEAKER CIRCUIT, SLC, POWER SUPPLY PANEL(S), AND OTHER MODULES AS NECESSARY TO MAINTAIN INDEPENDENT OPERATION DURING MAINTENANCE ON THE OTHER SMOKE COMPARTMENT(S).
- CONNECT NEW DEVICES TO SLC AND NAC EXISTING FIRE ALARM CIRCUITS ON THIRD FLOOR ZONE.

2 FIRE ALARM OPERATING MATRIX

DEVICE	ACTION																	NOTES
	INDICATE STATUS ON FACP & REMOTE ANNUNCIATOR (NOTE 1)	INITIATE ALARM STATUS	INITIATE TROUBLE STATUS	INITIATE SUPERVISORY STATUS	TRANSMIT SYSTEM STATUS SIGNAL TO CENTRAL STATION (NOTE 2)	ACTIVATE STROBES IN SMOKE COMPARTMENT	ACTIVATE SPEAKERS IN SMOKE COMPARTMENT; SOUND TEMPORAL 3 SIGNAL IN SMOKE COMPARTMENT	ACTIVATE SPEAKERS IN SMOKE COMPARTMENT; BROADCAST PRE-RECORDED VOICE MESSAGE (NOTE 3)	ACTIVATE SPEAKERS IN SMOKE COMPARTMENT; BROADCAST LIVE VOICE MESSAGE	ACTIVATE SPEAKERS OUTSIDE SMOKE COMPARTMENT; BROADCAST VOICE MESSAGE FOR STAFF NOTIFICATION (NOTE 4)	RECALL ELEVATOR TO PRIMARY RECALL FLOOR (4E)	RECALL ELEVATOR TO SECONDARY RECALL FLOOR (4E ROOFTOP LOUNGE)	ACTIVATE "FIREMAN'S HAT" LIGHT (STEADY)	ACTIVATE "FIREMAN'S HAT" LIGHT (FLASHING)	INITIATE ELEVATOR POWER SHUNT TRIP SEQUENCE	RELEASE DOOR HOLDERS (CLOSE DOORS) ON THE FLOOR	CLOSE FIRE/SMOKE DAMPERS	
MANUAL PULL STATION IN SMOKE COMPARTMENT	X	X			X	X	X			X						X		
AREA SMOKE DETECTOR IN SMOKE COMPARTMENT	X	X			X	X	X			X							X	
DOOR RELEASE SMOKE DETECTOR	X	X			X	X	X			X						X	X	
DUCT SMOKE DETECTOR IN SMOKE COMPARTMENT	X			X	X												X	X
INITIATING DEVICE (SMOKE DETECTOR, PULL STATION, ETC.) OUTSIDE SMOKE COMPARTMENT	X	X			X			X										
ELEVATOR LOBBY SMOKE DETECTOR (PRIMARY RECALL FLOOR)	X	X			X	X	X				X	X				X		
ELEVATOR LOBBY SMOKE DETECTOR (SECONDARY RECALL FLOOR)	X	X			X	X	X				X		X			X		
ELEVATOR MACHINE ROOM SMOKE DETECTOR	X	X			X	X	X				X			X				
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X			X	X	X				X			X	X			
ELEVATOR SHUNT TRIP POWER LOSS	X			X	X													
WATER FLOW SWITCH IN SMOKE COMPARTMENT	X	X			X	X	X			X						X		
WATER FLOW SWITCH OUTSIDE SMOKE COMPARTMENT	X	X			X			X								X		
VALVE TAMPER SUPERVISORY SWITCH	X			X	X													
WIRING FAULT, SYSTEM TROUBLE, COMMUNICATION FAULT	X		X		X													
LIVE VOICE MESSAGE BROADCAST	X				X				X									

- NOTES:
- REFER TO PROJECT SPECIFICATIONS FOR FACP AND REMOTE ANNUNCIATOR DISPLAY REQUIREMENTS.
 - TRANSMIT SIGNAL VIA EXISTING MONITORING/COMMUNICATIONS MEANS.
 - COORDINATE MESSAGE TO BE BROADCAST WITH FACILITY. OBTAIN COTR APPROVAL OF MESSAGE RECORDING PRIOR TO PROGRAMMING MESSAGE.
 - ACTIVATE SPEAKERS AS REQUIRED BY FACILITY PATIENT EVACUATION PLAN. THE PURPOSE OF THIS IS TO ALERT STAFF IN OTHER AREAS OF THE HOSPITAL SO THEY CAN RESPOND AND ASSIST WITH EVACUATION OF PATIENTS FROM THE AREA WHERE THE ALARM SIGNAL INITIATED. COORDINATE WITH FACILITY STAFF TO IDENTIFY REQUIRED SPEAKERS FOR OPERATION (IE - ENTIRE BUILDING, NEIGHBORING COMPARTMENTS, ETC.)
 - THIS INCLUDES DUCT SMOKE DETECTORS OR WATER FLOW SWITCHES PHYSICALLY LOCATED OUTSIDE THE SMOKE COMPARTMENT, BUT MONITORING SYSTEMS THAT SERVE THE SMOKE COMPARTMENT.
 - FOR THIS OPERATING MATRIX, THE SMOKE COMPARTMENT SHALL BE CONSIDERED 3E, 4E, AND 5E; ZONE 1 AND ZONE 2 AS SHOWN IN DRAWINGS.
 - OPERATIONS SHOWN THAT INVOLVE AREAS OUTSIDE WARD 4E ARE SHOWN ONLY AS THEY IMPACT ALARM OPERATIONS WITHIN THE WARD, OR ARE IMPACTED BY ALARM OPERATIONS WITHIN THE WARD. ANY EXISTING FIRE ALARM FUNCTION NOT SPECIFICALLY MODIFIED BY THE REQUIREMENTS OF FIRE ALARM OPERATION FOR WARD 4E MUST CONTINUE TO FUNCTION AS CURRENTLY INTENDED. CONTRACTOR SHALL PROVIDE A PRINTED AND AN ELECTRONIC COPY OF THE CURRENT FIRE ALARM PROGRAM PRIOR TO MAKING ANY CHANGES TO THE FA PROGRAM.
 - FOR ELEVATOR LOCATED WITHIN SMOKE COMPARTMENT.
 - A RELAY SHALL BE ACTIVATED TO SIGNAL MECHANICAL UNITS SERVING ISOLATION ROOMS TO REDUCE THE RATE OF AIRFLOW ANYTIME THE AIR-HANDLING UNIT SERVING 4E IS SHUT DOWN.

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SEAL:	ARCHITECT/ENGINEERS:

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Approved: Project Director	

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Location WASHINGTON	DC
Date 04/20/2010	Checked FAE
	Drawn PAM

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Office of Facilities Management	